METHOD AND APPARATUS USING HARMONIC-MODEL-BASED FRONT END FOR ROBUST SPEECH RECOGNITION

ABSTRACT OF THE DISCLOSURE

A system and method are provided that reduce noise in speech signals. The system and method decompose a noisy speech signal into a harmonic component and a residual component. The harmonic component and residual component are then combined as a sum to form a noise-reduced value. In some embodiments, the sum is a weighted sum where the harmonic component is multiplied by a scaling factor. In some embodiments, the noise-reduced value is used in speech recognition.